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(54) Title: SURFACE-MODIFIED BASE MATRICES

(57) **Abstract:** The present invention is a surface-modified base matrix comprised of a porous polymeric base matrix onto which branched hydrophilic polyhydroxy-functional polymers have been covalently attached, wherein the polyhydroxy-functional polymers are hyper-branched polymers presenting a degree of branching (DB) of at least about 0.2 and each polymer is tethered to the base matrix at two or more points. The present matrix can for example be a cross-linked carbohydrate material, such as agarose, and the hyperbranched hydrophilic polymer can e.g. be a copolymer of epichlorohydrin and a sugar. The invention also relates to a method of surface-modification of a porous base matrix by activating functional hydroxy groups thereon and contacting the activated matrix with a hydrophilic hyperbranched hydroxy-functional polymer.



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